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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,226	04/23/2001	Paul Aubrey Greenfield	09/100.000	3270

7590 12/17/2003

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EXAMINER	
CAO, DIEM K	
ART UNIT	**PAPER NUMBER**
2126	4

DATE MAILED: 12/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/830,226	GREENFIELD ET AL.	
	Examiner	Art Unit	
	Diem K Cao	2126	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 April 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-40* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-40* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *23 April 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This Office Action is in response to the Application filed on 4/23/2001.

2. Claims 1-40 are presented for examination.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Fig. 3, reference numbers 21, 31, etc. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

The drawing (Fig. 3) is incomplete. Correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1-7, 10-20, 23-26, 28-34, and 37-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills et al. (WO 97/37303) in view of Matthews et al. (U.S. 5,974,256).

As to claim 1, Mills teaches a legacy software application (an application on the legacy host system; page 7, lines 4-21), a network environment (TCP/IP environment; page 5, lines 20-24), network computer resources (client systems 36; page 6, lines 25-35), an executable code (web/emulator server 26, client thread 28, data storage device 32 that stores applet code 34; page 6, lines 10-24), a series of software components (applet code 34; page 6, lines 10-24), the

software components being executable by at least one of the computing resources (Applet process 42 comprises an instance of applet code 34 downloaded to client system; page 6, lines 25-35), interact with the legacy software application in the transmission of receipt of information to and from the legacy software application (Client thread 28 ... on a legacy host system; page 7, lines 4-21).

However, Mills does not explicitly teach creating a translatable source code, utilizing the translatable source code to produce a series of software components. Matthews teaches creating a translatable source code (Java code snippet; col. 5, lines 13-25), utilizing the translatable source code to produce a series of software components (Java source files; col. 5, lines 37-48).

It would have been obvious to improve the system of Mills by applying the teaching of Matthews because it reduces the time and effort necessary to port a platform dependent software application into a platform-independent programming environment (col. 1, lines 64-67).

As to claim 2, Mills does not teach interface specification definitions which include definitions of screen formats, generating a series of user interface software components from the screen format definitions, the user interface software components being arranged for execution on the network computing resource to provide a graphical user interface providing at least data entry and display facilities of the interface specification definitions.

Matthews teaches interface specification definitions which include definitions of screen formats (a resource definition file defines the layout of windows ... a software application; col. 3, lines 52-67), generating a series of user interface software components from the screen format definitions (java source files; col. 5, lines 13-48), the user interface software components being arranged for execution on the network computing resource to provide a graphical user interface

(Java based version of the window layout; col. 2, lines 19-35) providing at least data entry and display facilities of the interface specification definitions (a resource definition defines the layout of windows, menus, bitmaps, icons and other basic control that comprise a graphical user interface; col. 3, lines 59-62 and the files comprise the window layout for the particular resource in question; col. 4, lines 17-39).

It would have been obvious to apply the teaching of Matthews to the system of Mills because it provides a method to translate resource definition files to native Java source code to facilitate quick migration of existing applications from a resource-based environment to the Java programming environment (col. 1, lines 56-60).

As to claim 3, Mills does not teach the interface software components are arranged to generate forms corresponding to forms generated by the legacy software application. Matthews teaches the interface software components are arranged to generate forms corresponding to forms generated by the legacy software application (Individual Java snippets are collected ... the resource definition file; col. 5, lines 37-48).

As to claim 4, Mills teaches the client interface components being arranged to interact over the network with the legacy software application (Client thread 28 ... on a legacy host system; page 7, lines 4-21).

As to claim 5, Mills teaches the client interface components include a user input object which is arranged to receive data input by a user and transmit the data to the legacy application over the network (inherent from Client thread and applet process allow a user of client system to use web browser to invoke a terminal session for accessing data; page 7, lines 13-16).

As to claim 6, Mills teaches the series of software components are loadable and executable by an Internet Browser (Client system 36, web browser38 ... executing an applet process, applet process 42 ... downloaded to client system 36; page 6, lines 25-33).

As to claim 7, Mills teaches the series of software components comprise Java code applets (applet code 34 comprises executable code for an applet process; page 6, lines 18-21).

As to claim 10, Mills teaches the network environment comprises the Internet network (TCP/IP environment; page 6, lines 10-15).

As to claim 11, Mills teaches the network environment utilizes TCP/IP transfer protocols (TCP/IP environment; page 6, lines 10-15).

As to claim 12, Mills as modified by Matthews does not teach the translatable source is written in a 4GL language. Matthews teaches the translatable source is written in Java programming language and suggests the inventive concepts may be applied more generally (col. 10, lines 22-25). It would have been obvious to improve the system of Mills as modified because 4GL provides a language which is closer to human language and easier to understand.

As to claim 13, Mills as modified by Matthews does not teach the translatable source is written in the LINC language. Matthews teaches the translatable source is written in Java programming language and suggests the inventive concepts may be applied more generally (col. 10, lines 22-25). It would have been obvious to improve the system of Mills as modified because LINC is one type 4GL and provides a language which is closer to human language and easier to understand.

As to claims 14 and 28, they correspond to the method claim of claim 1 except they are computer product and system claims, respectively.

As to claims 15-20, see rejections of claims 2-7 above.

As to claims 23-24, see rejections of claims 10-11 above.

As to claim 25, see rejection of claim 13 above.

As to claim 26, the terminal screen definitions as written in a screen control language.

As to claims 29-34, see rejections of claims 2-7 above.

As to claims 37-40, see rejections of claims 10-13 above.

6. Claims 8, 21, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills et al. (WO 97/37303) in view of Matthews et al. (U.S. 5,974,256) further in view of Apte et al. (U.s. 6,662,236 B1).

As to claim 8, Mills does not teach the series of software components are executable by scripting language running on the network computing resource. Apte teaches the series of software components are executable by scripting language running on the network computing resource (JavaScript complements Java ... of an applet; col. 2, lines 38-48 and Fig. 2). It would have been obvious to apply the teaching of Apte to the system of Mills because it can expose useful properties of Java applets.

As to claims 21 and 35, see rejections of claim 8 above.

7. Claims 9, 22, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills et al. (WO 97/37303) in view of Matthews et al. (U.S. 5,974,256) further in view of Harold (Using Component Methods in an Applet).

As to claim 9, Mills does not teach the translatable source code includes a series of data fields and object oriented methods for setting or obtaining values of the series of data fields. Harold teaches the translatable source code includes a series of data fields and object-oriented

methods for setting or obtaining values of the series of data fields (Since applets are subclass of ... paint () method; page 1).

As to claims 22 and 36, see rejections of claim 9 above.

8. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews et al. (U.S. 5,974,256) in view of Admitted Prior Art (APA).

As to claim 27, Matthews teaches a legacy software application (platform dependent application; col. 1, lines 64-67), template definitions from which a legacy software application can be generated (resource definition files; col. 3, lines 59-63), utilizing the template definitions to produce a series of software components (Java source files; col. 5, lines 13-48), the components being executable by at least a computing resource (the computer; col. 9, lines 28-45), upon execution, the computing resource is caused to interconnect with the legacy software application so as to interact with the legacy application in the transmission and receipt of information to and from the legacy application (migrate platform dependent application to platform-independent application; col. 1, lines 56-59 and translate graphical user interface to Java native code that form the Java-based version of the window layout; col. 2, lines 7-35).

However, Matthews does not teach a 4GL legacy application. APA teaches 4GL is one type of legacy application (page 1, lines 26-33). It would have been obvious the system of Matthews can migrate the 4GL legacy application.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diem K Cao whose telephone number is (703) 305-5220. The examiner can normally be reached on Monday - Thursday, 9:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee can be reached on (703) 305-8498. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:
Commissioner for Patents
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Alexandria, VA 22313-1450

Diem Cao

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